

“System for Configuring Graphic Display Elements and Process Modules in Process

Plants ~~(Atty. Docket No. 06005/41118)~~; “Graphic Display Configuration Framework for Unified Process Control System Interface” ~~(Atty. Docket No. 06005/41124)~~;

“Markup Language-Based, Dynamic Process Graphics in a Process Plant User Interface” ~~(Atty. Docket No. 06005/41127)~~; “Methods and Apparatus for Modifying Process Control Data” ~~(Atty. Docket Nos. 06005/591622 and 20040/59-11622)~~;

“Methods and Apparatus for Accessing Process Control Data” ~~(Atty. Docket Nos. 06005/591623 and 20040/59-11623)~~; “Integrated Graphical Runtime Interface for

Process Control Systems” ~~(Atty. Docket Nos. 06005/591628 and 20040/59-11628)~~;

“Service-Oriented Architecture for Process Control Systems” ~~(Atty. Docket Nos. 06005/591629 and 20040/59-11629)~~.

### Technical Field

[0002] The present invention relates generally to process plants and, more particularly, to the integration and use of a graphic display editor and graphic display objects at a system level of a process control and simulation system to enable the creation and use of common graphic display elements in various activities associated with plant configuration, control, maintenance, and simulation.

### Description of the Related Art

[0003] Distributed process control systems, like those used in chemical, petroleum or other processes, typically include one or more process controllers communicatively coupled to one or more field devices via analog, digital or combined analog and digital buses. The field devices, which may be, for example, valves, valve positioners, switches and transmitters (e.g., temperature, pressure, level and flow rate sensors), are located within the process environment and perform process functions such as opening or closing valves, measuring process parameters, etc. Smart field devices, such as the field devices conforming to the well-known Fieldbus protocols, like the FOUNDATION<sup>TM</sup> Fieldbus protocol, may also perform control calculations, alarming functions, and other control functions commonly implemented within the controller. The process controllers, which are also typically located within the plant environment, receive signals indicative of process measurements made by the field devices and/or other information pertaining to the field devices and execute a

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**SCRIPTED GRAPHICS**  
**IN A PROCESS ENVIRONMENT**

**Related Applications**

[0001] This application is a regular filed application of and claims, for the purposes of priority, the benefit of U.S. Provisional Application Serial No. 60/567,980, entitled "Graphical User Interface for Representing, Monitoring, and Interacting with Process Control Systems," which was filed on May 4, 2004 and which this application hereby expressly incorporates by reference herein in its entirety. This application is also related to U.S. Patent Application Serial Number 10/625,481, entitled "Integration of Graphic Display Elements, Process Modules and Control Modules in Process Plants," which was filed on July 21, 2003, and which published as U.S. Publication No. 2004/0153804 on August 5, 2004, which, in turn, is a Continuation-in-Part of U.S. Patent Application Serial No. 10/278,469, entitled "Smart Process Modules and Objects in Process Plants," which was filed on October 22, 2002, and which published as U.S. Publication No. 2004/0075689 on April 22, 2004, the entire disclosures of which are hereby expressly incorporated by reference herein in their entirety. This application is also related to U.S. Patent Application Serial Number 10/368,151 entitled "Module Class Objects in a Process Plant Configuration System," which was filed on February 18, 2003, and which published as U.S. Publication No. 2004/0199925 on October 7, 2004, the entire disclosure of which is hereby expressly incorporated by reference herein in its entirety. This application is also related to the following patent applications, which are being filed as International (PCT) applications on the same date as this application and which this application hereby expressly incorporates by reference herein in their entirety: "Associated Graphic Displays in a Process Environment" (PCT/US05/15943) (Atty. Docket No. 06005/41111); "User Configurable Alarms and Alarm Trending for Process Control Systems" (PCT/US05/15537) (Atty. Docket No. 06005/41112); "Integration of Process Modules and Expert Systems in Process Plants" (PCT/US05/15556) (Atty. Docket No. 06005/41113); "A Process Plant User Interface System Having Customized Process Graphic Display Layers in an Integrated Environment" (PCT/US05/15392) (Atty. Docket No. 06005/41114); "Graphics Integration into a Process Configuration and Control Environment" (PCT/US05/15588) (Atty. Docket No. 06005/41116); "Graphic Element with Multiple Visualizations in a Process Environment" (PCT/US05/15390) (Atty. Docket No. 06005/41117);

Change(s) applied  
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